The Structure of the Talc Supply Market

Mike O’Driscoll, Editor, Industrial Minerals

3rd China Liaoning International Magnesia Materials Exposition
20-24 September, Shenyang, China
The structure of the talc supply market
Mike O’Driscoll, IM, 3rd CLIMME, 20-24 September 2008, Shenyang

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Outline

1. World production review - countries
2. World production review - companies
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World production review - countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Production (tpa)</th>
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<tbody>
<tr>
<td>China</td>
<td>2-2.5m.</td>
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<td>USA</td>
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<td>Russia</td>
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<tr>
<td>Italy</td>
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<tr>
<td>Spain</td>
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</tbody>
</table>

Total world production adjusted: 6.6m. tonnes

World production review - countries

- China: 2-2.5m. tpa
- USA: 880,000
- India: 687,056
- Finland: 547,146
- France: 400,000
- Brazil: 389,391
- Austria: 159,447
- Australia: 150,923
- Russia: 150,000
- Italy: 100,000
- Spain: 100,000

Total world production 8m. tonnes 2006 (BGS) adjusted 6.6m. tonnes
World production review - companies

- **Rio Tinto Minerals**, global
- **Mondo Minerals**, Finland, Norway
- **Specialty Minerals**, USA
- **RT Vanderbilt**, USA
- **IMI Fabi**, Italy, USA, Australia

*Source: RTM*
Changes in corporate landscape
Rio Tinto Minerals

2006-07 Restructuring programme
2008/09? RTM divestment
Changes in corporate landscape

Rio Tinto Minerals

- 25% world demand
- 1.28m. tonnes 2007
- 679,000 tonnes H1 2008
- all markets, ex. ceramics
Changes in corporate landscape
Rio Tinto Minerals

Global operations

Source: RTM
Changes in corporate landscape
Rio Tinto Minerals

2007 improvement programme
• Streamlining
• Plant optimisation
• Mine planning
• Supply chain reconfiguration

• Closure: Three Springs plant, Australia
  Widnes plant, UK
• Sale: Lassing & Ennsdorf plants, Austria
• Investment: Rabenwold, Kleinfeistritz mines, Austria
Changes in corporate landscape

Mondo Minerals

- 2006 $53.7m. investment
  Sotkamo 330,000 tpa
  total 760,000 tpa
- 2007 40th Anniversary
- was Omya AG’s talc arm until…
- acquired by Hg Capital Trust late 2007
Changes in corporate landscape
Specialty Minerals Inc.

- part of Minerals Technologies Inc.
  total 760,000 tpa
- talc mine: Barretts, Montana
- processing plants: Mt Vernon, Indiana, Wellsville, Ohio
- 2006 capacity expansions
- 2002 acquisition of Polar Minerals = plastics market
Changes in corporate landscape

RT Vanderbilt

- 4 mines, 2 plants New York state
- June 2007 withdrew sales to Europe
- End-2008 exit from talc business
  - declining ceramics market
  - asbestos related issue litigation
- focus on bentonite, kaolin, pyrophyllite
Changes in corporate landscape
American Talc Co.

- emerged from Wold Talc Co.
- consolidation of acquisitions in 2006-07
  - Suzorite Mineral Products Inc., Van Horn, Texas
  - Milwhite inc., Van Horn, Texas
- aggressive exploration programme = 25m. Tonnes
- 70-80,000 tpa supplied to regional ceramics market
Changes in corporate landscape

India

3 primary producers
Golcha Group
Golcha Associated
Jai Group

2008 capacity expansions
Jai Group
100-200,000 tpa over next 3 years
Changes in corporate landscape

India

2008 capacity expansions

Golcha Group

+100,000 tpa, Jaipur, India

new 60,000 tpa plant, Thailand
Market outlook

Source: RTM
Market outlook

Key drivers

- Plastics - automobiles
- Paper - advertising
- Paints/ceramics - construction
Market outlook

Key drivers

China challenges

• exhaustion in small/medium mines
• increased demand for high grade talc
Market outlook

Key drivers

China challenges

• strengthened purchasing of Chinese supply to West

• freight rates rise/availability

• government export policy
Summary

- Continued change in corporate landscape – divestment of RTM assets (talc, borates)
- Supply market sector will remain select group of global players
- Opportunities taken by talc producers to expand capacities and pursue markets in light of RTV exit, RTM fall out, and Chinese situation
- Market demand growth in eastern Europe, Asia

Thank you for your kind attention